

Work Order ID 138768

November 12, 2015 10:47:02 AM

647.3903
B 138768
REV. C1

138768

Needed for an
order shipping
Feb 12

Page 1

Item ID: 647.3903

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Deflector Assembly

Start Date: 11/12/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 11/26/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: 54

Date: 2015 11 12

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

647.3900

C1

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

DAS
6
9-89

FEB 08 2016

120

0.00

120

Small Fab

Memo

0.00

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note.

A/R RTV LOCTITE 598: 1133463

exp. date: 07/17

2x

16/02/16
DAS
36
9-89

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

(2)

DAS
38
9-86
FEB 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

MLC

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER :			

Picklist Print

November 12, 2015 10:47:09 AM

Page 1

Work Order ID: 138768

138768

Parent Item: 647.3903

647.3903

Parent Item Name: Deflector Assembly

Start Date: 11/12/2015

Required Date: 11/26/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 14.07.21 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.3915		Manufactured	No				Each	24.0000		2			
647.3915									**				DAS
Deflector													6 9-89

Location	Loc Qty	Loc Code
CCK054	24	
131243	18	
131611	6	

647.3916		Manufactured	No				Each	0.0000		2			
647.3916									**				DAS
Deflector													6 9-89

647.3917		Manufactured	No				Each	5.0000		4			
647.3917									**				FEB 08 2016
Doubler													DAS 9-8 6 98 9-89

Location	Loc Qty	Loc Code
cck111	5	
133001	5	

CR3213-6-9		Purchased	No				Each	26.0000		12			
CR3213-6-9									**				DAS
Cherry Rivet													6 9-89

Location	Loc Qty	Loc Code
ST318	26	
m131049	26	

FEB 08 2016



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO. 04948

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY: M. ANDECK

DATE: 05/04/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

Bravo

MFG

Dave Decker

QC

Bill

EFF:

CURRENT ORDER

TRANSACTION CODES (TC):

A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED TOLERANCE AND NOTES

ECR:

D-15-01

NOTES:

1. MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.

2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;

3. DEBURR AND BREAK ALL SHARP EDGES.

4. IDENTIFY IAW MPP-120.

5. APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.

6. MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.

7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES

8. FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.

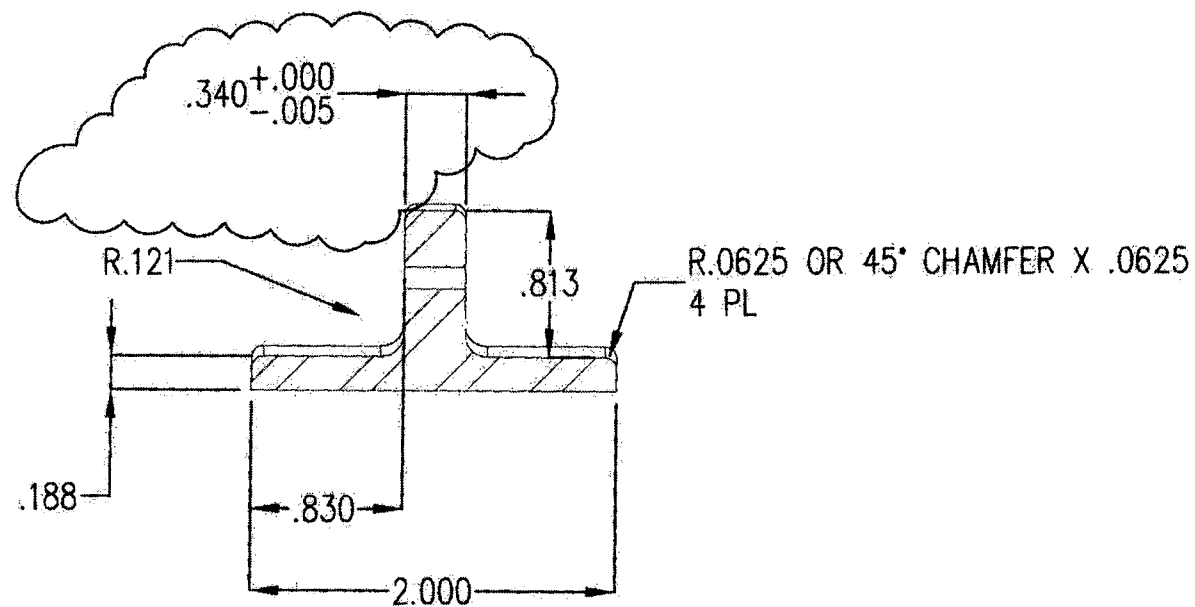
9. FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

10. MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

SHEET 1, ZONE B1 IS:

120151112 54 138768

11	R	647.3917	2			DOUBLER			
F/N	TC	PART NUMBER	.3903	.3902	.3901	DESCRIPTION	MATERIAL	SPECIFICATION	
			QTY						
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO	



SECTION AT-AT

SHEET 11, ZONE C1 IS:

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY: ENGR *[Signature]*

MFG *[Signature]* QC *[Signature]*

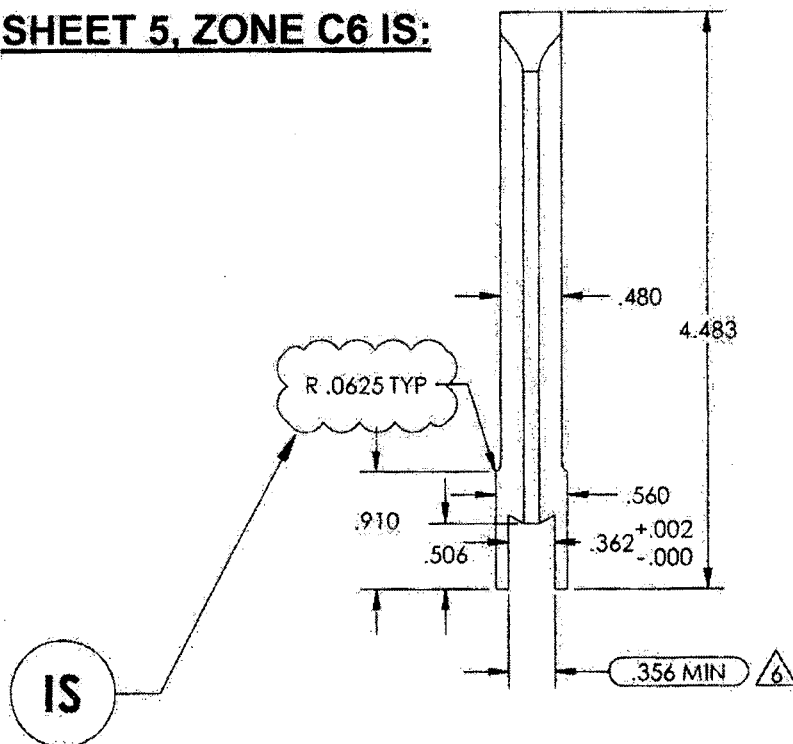
EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

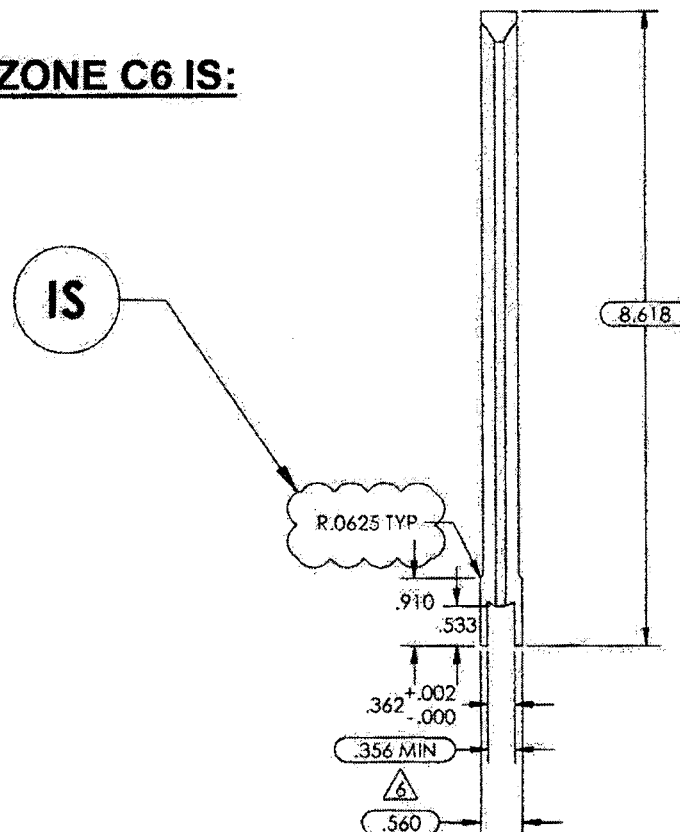
REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

ECR: D-14-04

SHEET 5, ZONE C6 IS:

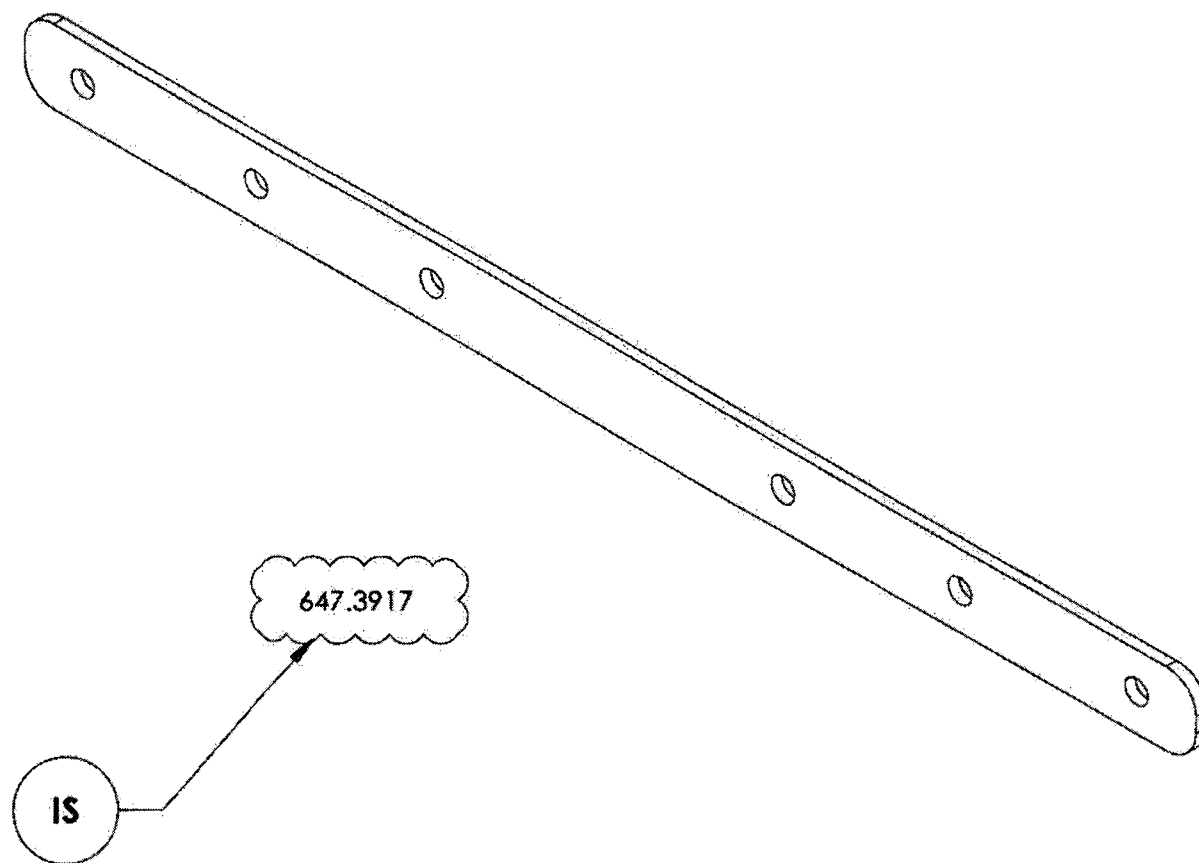


SHEET 6, ZONE C6 IS:



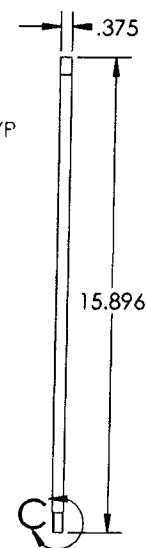
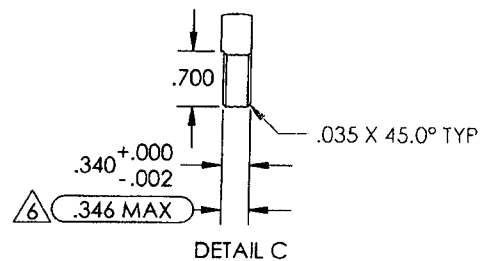
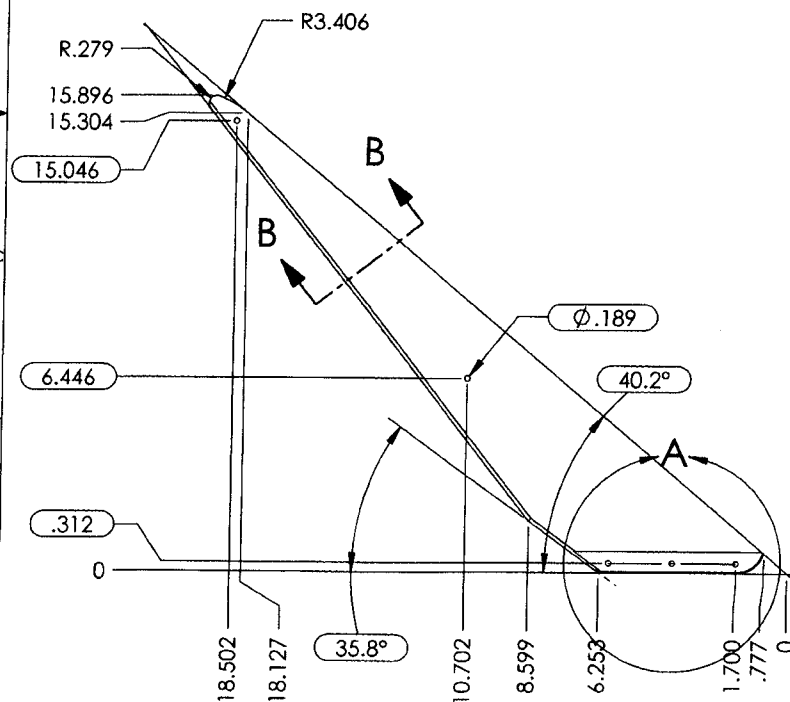
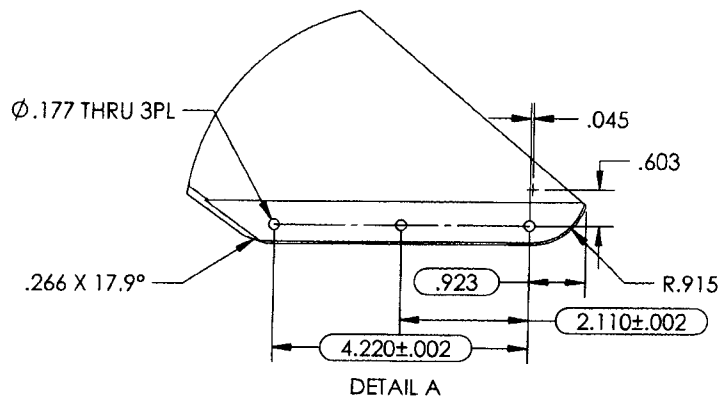
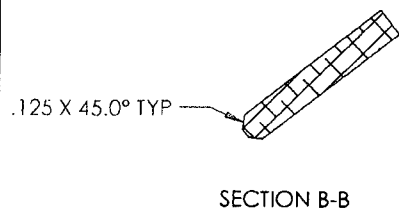
SHEET 1, BOM IS:

11	R	647.3917	2			DOUBLER	1	8
F/N	TC	PART NUMBER	3903	3902	3901	DESCRIPTION	MATERIAL	SPECIFICATION
		QTY						
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED
☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO

SHEET 12, ZONE B5 IS:

6				12	601.3072	RIVET		CR3213-6-9	
2				11	647.3917	DOUBLER			
1				10	647.3916	DEFLECTOR, UPPER HALF	△		△
1				9	647.3915	DEFLECTOR, LOWER HALF	△		△
	1			8	647.3914	BREAKAWAY TIP LONG	△		△ △
		1		7	647.3913	BREAKAWAY TIP MEDIUM	△		△ △
	1	1		6	647.3912	LOWER DEFLECTOR	△		△ △
				5	647.3911	212 UPPER DEFLECTOR	△		△ △
				4	647.3910	412 UPPER DEFLECTOR	△		△ △
A/R	A/R	A/R		3	601.2045	RTV, LOCTITE 598			△
	3	2		2	601.3074	RIVET		MS20470AD 6-12	
				1		DELETED			
X					647.3903	DEFLECTOR ASSY			△
	X				647.3902	LOWER DEFLECTOR ASSY HIGH			
		X			647.3901	LOWER DEFLECTOR ASSY LOW			
.3903	.3902	.3901		FIND #	PART #	DESCRIPTION		MAT'L	SPEC
QTY				PARTS LIST					
NEXT ASSY (S)				APICAL INDUSTRIES					
647.3800				2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300					
				DEFLECTORS					
				ORIGINAL DATE: 07-10-99 DRAWN BY: DISCHUR CHECKED BY: BARBER DRAWING APPROVAL: P. BRAVO PURCHASE CONTRACT NO.					
				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 12 PLACES DECIMALS ±.01 3 PLACES DECIMALS ±.005 ANGLES ±.5°					
REV. C		PAGE CODE NO.		DWG. NO.		647.3900		REV. C	
SCALE		NONE		SHEET		1		OF 12	

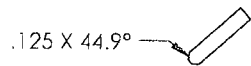
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



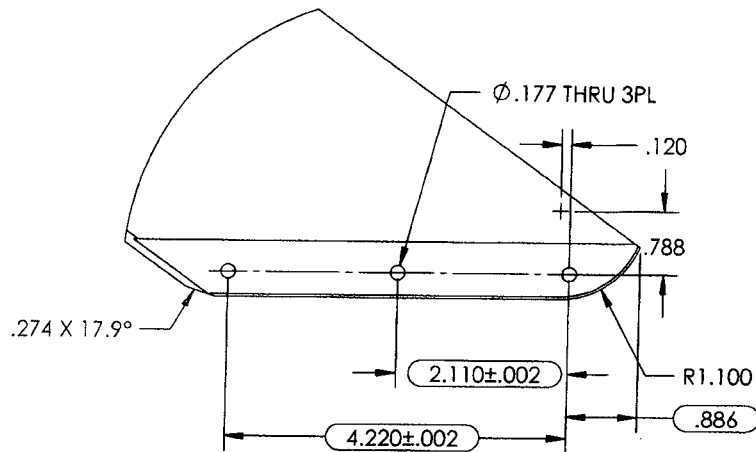
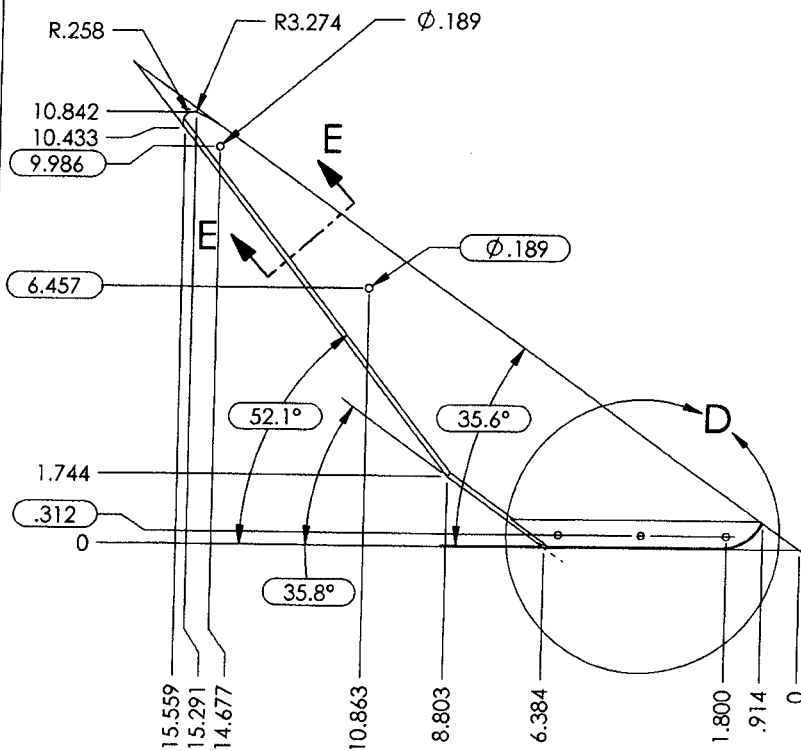
647.3911

ORIGINAL DATE INCHES (YES) OR 10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHUR	CHECKED D.BARBER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAY 07/10/09		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. C	
SEE CASE CODE B 07M26	DWG. NO. 647.3900	SCALE NONE	SHEET 2 OF 12

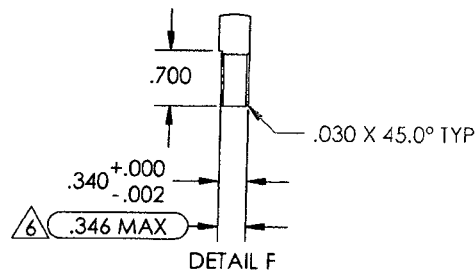
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



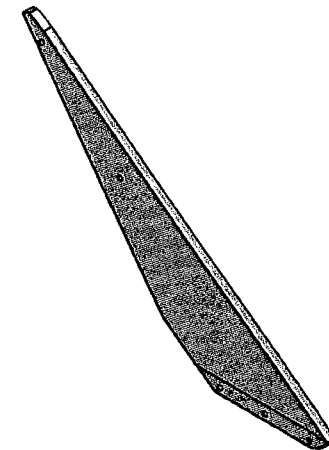
SECTION E-E



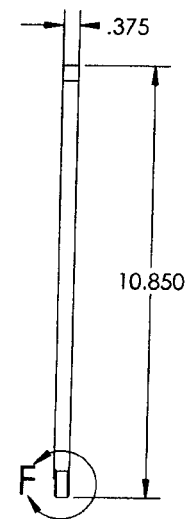
DETAIL D



DETAIL F

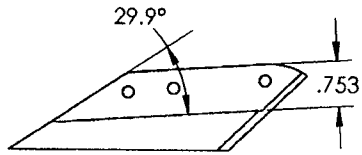


647.3910

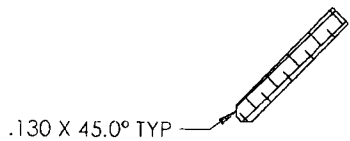


ORIGINAL DATE (MM-DD-YY) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D. SCHUP	CHECKED D. BARBER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO		DEFLECTORS	
CONTRACT NO.		647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm$.01 3 PLACE DECIMALS $\pm$.005 ANGLES $\pm$.5°		SHEET B	REV C
		CAGE CODE 07M26	SCALE: NONE
		DWG. NO. 647.3900	SHEET 3 OF 12

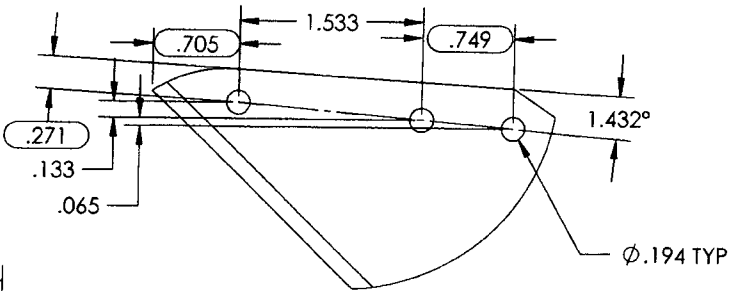
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



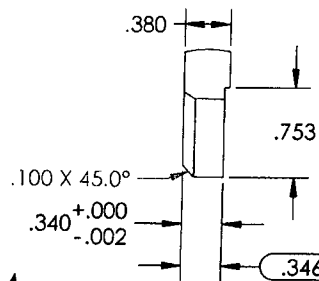
SECTION L-L



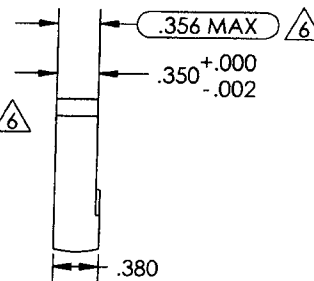
SECTION M-M



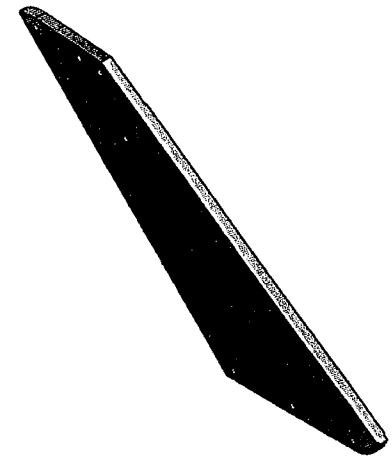
DETAIL H



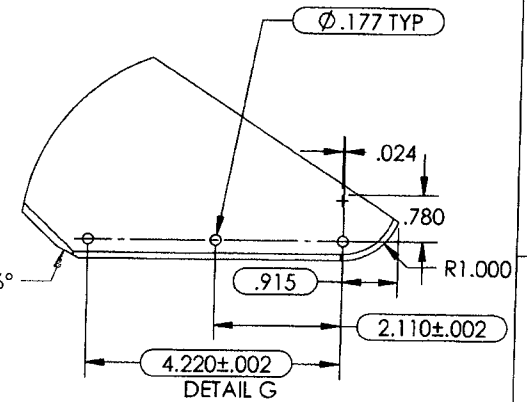
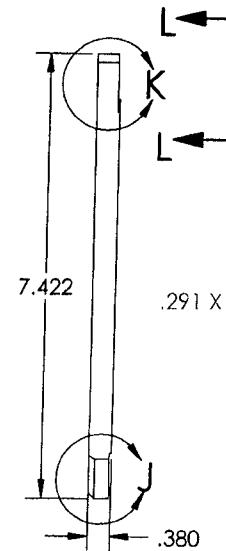
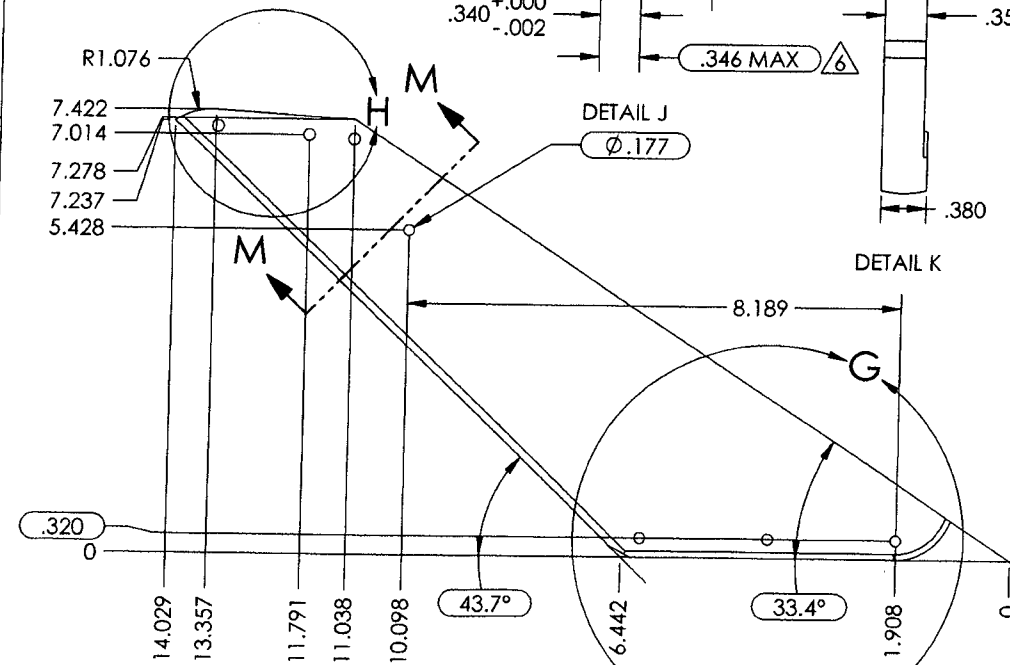
DETAIL J



DETAIL K

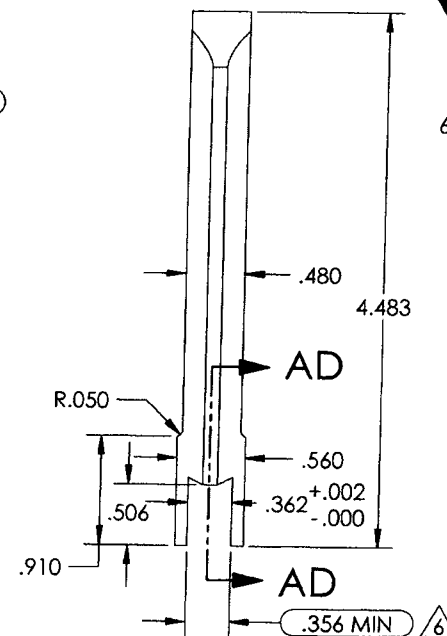
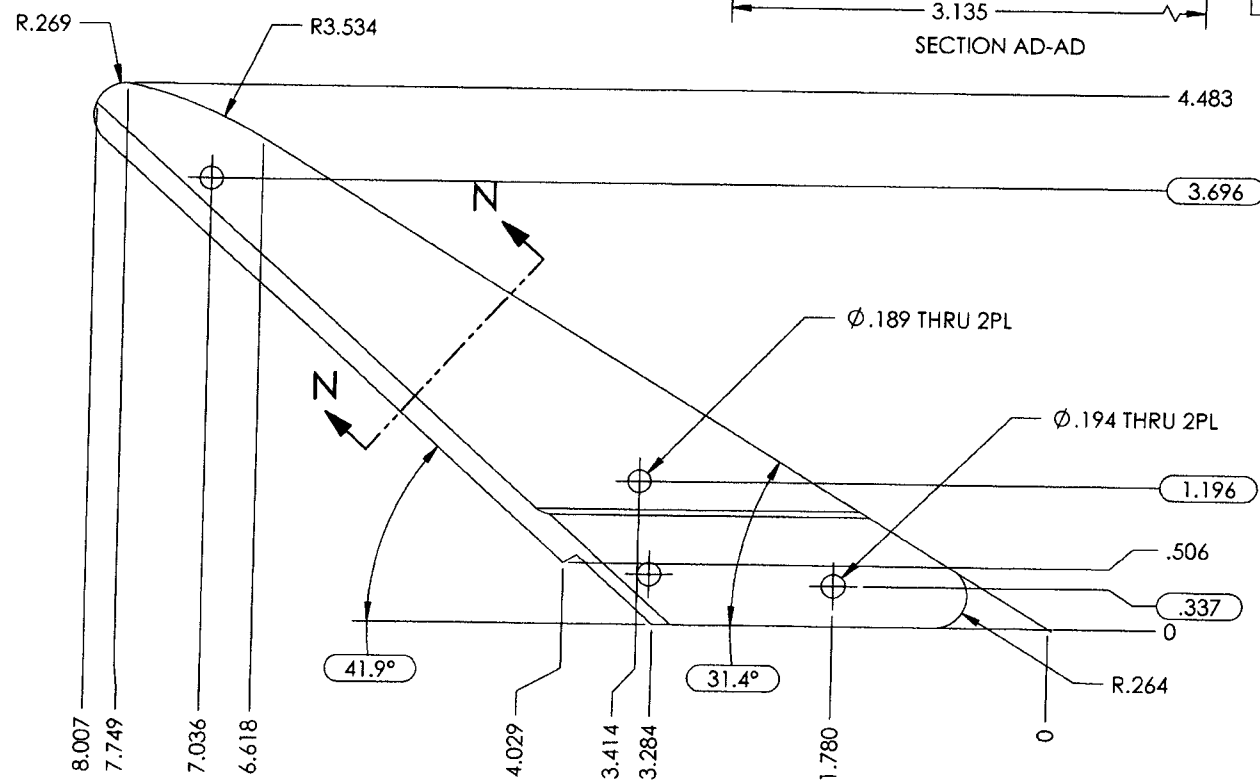
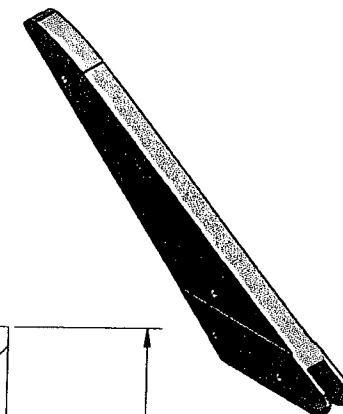
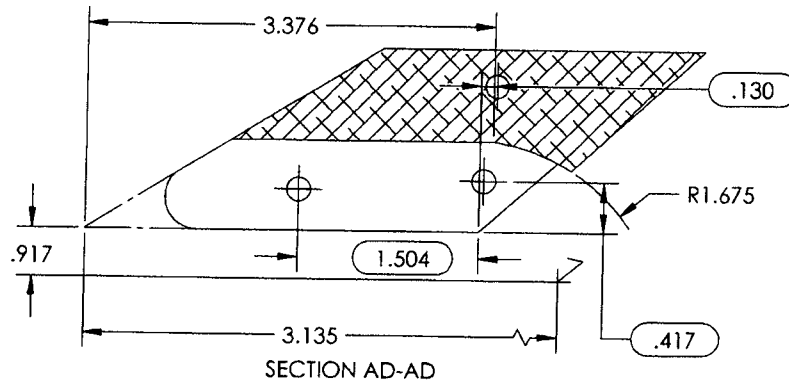
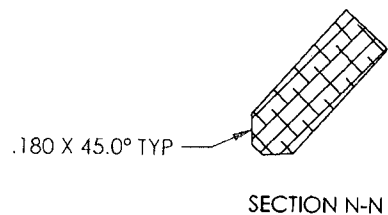


647.3912



ORIGINAL DATE 10-10-09		APICAL INDUSTRIES	
DRAWN BY C. BARKER	CHECKED BY C. BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO	CONTRACT NO.	DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET B 07M16	REV. C
SCALE NONE		DWG. NO. 647.3900	SHEET 4 OF 12

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



ORIGINAL DATE
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
3 PLACE DECIMALS .001
3 PLACE DECIMALS .005
ANGLES ± .5°

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SIZE	CAGE CODE	DWG. NO.	REV.
B	07M26	647.3900	C
SCALE NONE			SHEET 5 OF 12

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

SECTION T-T

.175 X 45.0° TYP

SECTION AB-AB

647.3914

DEFLECTORS

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

ORIGINAL DATE: 09-10-09
DRAWN BY: D. SCHUR
CHECKED BY: D. BARKER
DRAWING APPROVAL: P. BRAVO
CONTRACT NO.: 647.3914

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

SCALE: NONE

SHEET 4 OF 12

The drawing consists of three main views: a side view on the left, a cross-section view (SECTION T-T) at the top, and an end view (SECTION AB-AB) in the center. The side view shows a deflector with a top radius of R.267 and a bottom radius of R3.354. It includes vertical dimensions of 12.148, 11.192, 10.597, 1.224, .533, .252, and 0. Horizontal dimensions at the bottom are 3.875, 3.129, 3.123, .824, and 0. A hole is specified as Ø.189 THRU 2PL and Ø.194 THRU 3PL. An angle of 42.83° is shown. The cross-section (SECTION T-T) shows a .175 thick material with a 45.0° angle. The end view (SECTION AB-AB) shows a deflector with a top radius of R1.671 and a bottom radius of R.050 TYP. It includes dimensions of 3.072, .740, .306, 1.556, 2.306, 3.068, .931, .418, .910, .533, .362, .356 MIN, and .560. A hole is specified as Ø.189 THRU 2PL. A note indicates that the deflector is made of .175 X 45.0° TYP material. A large dimension of 647.3914 is shown on the right side of the drawing. The drawing is titled 'DEFLECTORS' and is part of a set of 12 sheets, with this being sheet 4. The drawing was created on 09-10-09 by D. SCHUR and checked by D. BARKER. The contract number is 647.3914. The drawing is for a deflector assembly with a top radius of R.267 and a bottom radius of R3.354. It includes vertical dimensions of 12.148, 11.192, 10.597, 1.224, .533, .252, and 0. Horizontal dimensions at the bottom are 3.875, 3.129, 3.123, .824, and 0. A hole is specified as Ø.189 THRU 2PL and Ø.194 THRU 3PL. An angle of 42.83° is shown. The cross-section (SECTION T-T) shows a .175 thick material with a 45.0° angle. The end view (SECTION AB-AB) shows a deflector with a top radius of R1.671 and a bottom radius of R.050 TYP. It includes dimensions of 3.072, .740, .306, 1.556, 2.306, 3.068, .931, .418, .910, .533, .362, .356 MIN, and .560. A hole is specified as Ø.189 THRU 2PL. A note indicates that the deflector is made of .175 X 45.0° TYP material. A large dimension of 647.3914 is shown on the right side of the drawing. The drawing is titled 'DEFLECTORS' and is part of a set of 12 sheets, with this being sheet 4. The drawing was created on 09-10-09 by D. SCHUR and checked by D. BARKER. The contract number is 647.3914.

SECTION T-T

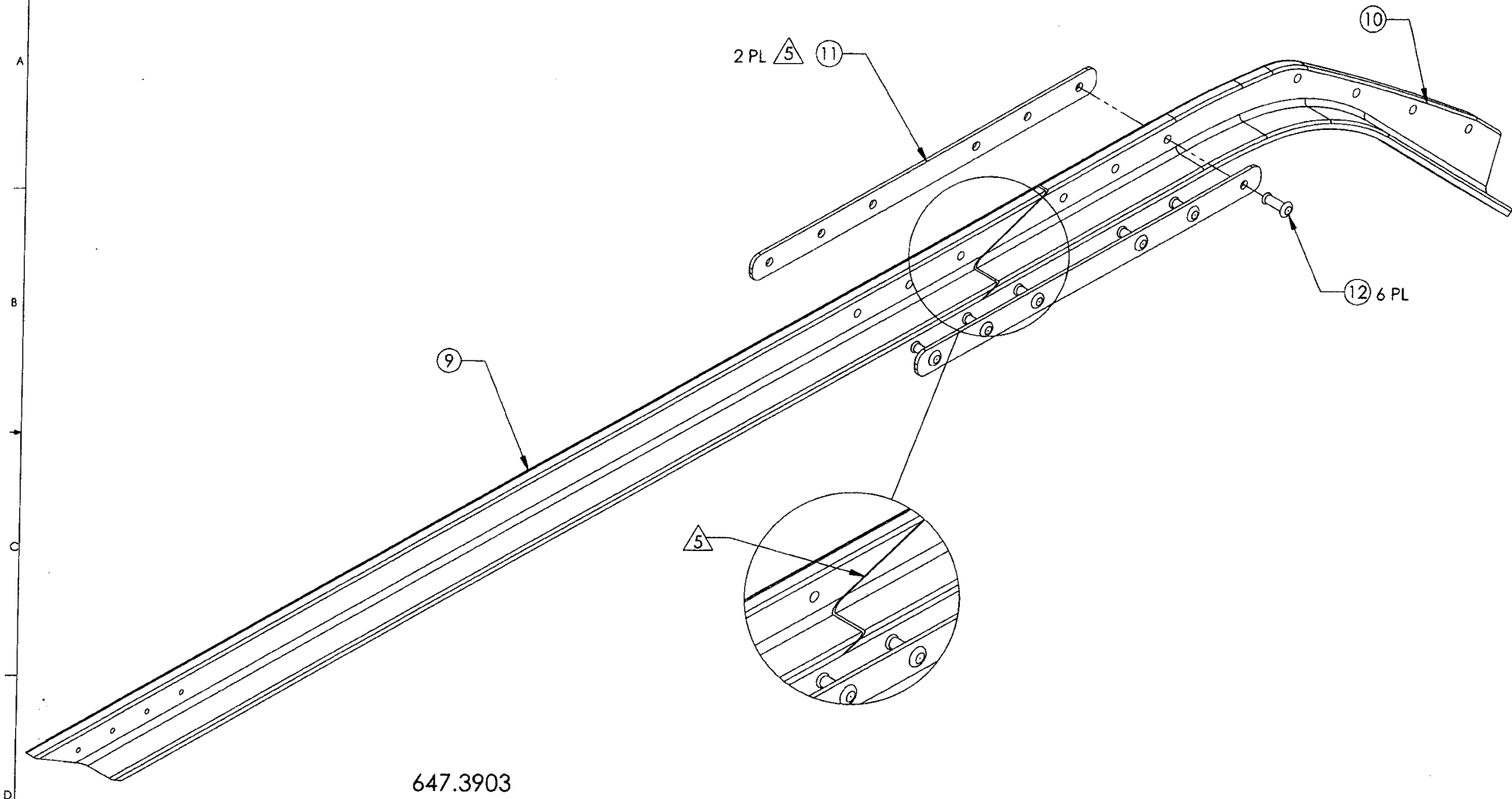
SECTION T-T

SECTION AB-AB

647.3914

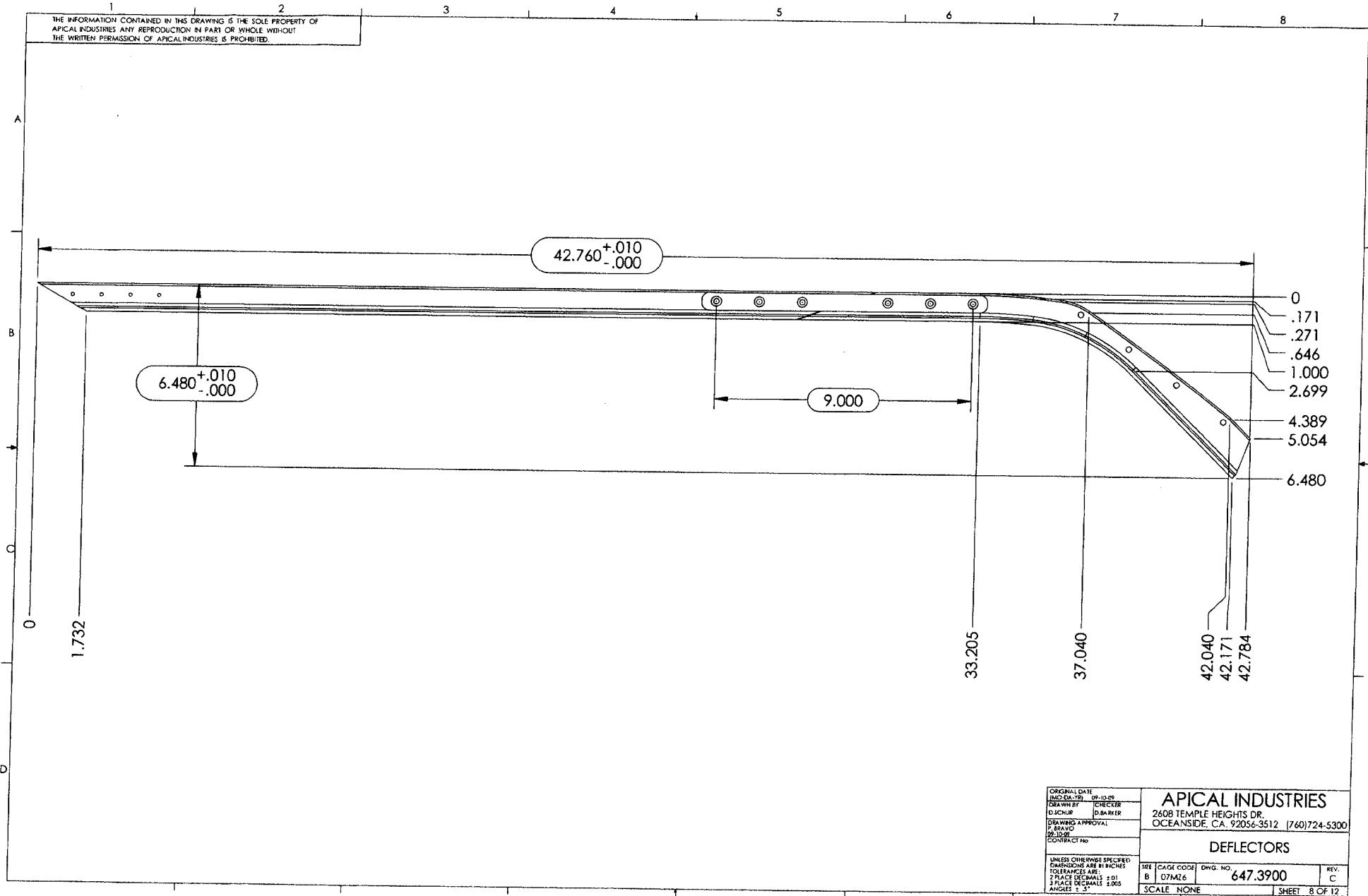
ORIGINAL DATE (M-D-Y) 09-10-09 DRAWN BY D.SCHUR D.BREWER DRAWING APPROVAL P. MAVO 09-10-09 CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300			
DEFLECTORS				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. 3 PLACE DECIMALS ±.01 2. 2 PLACE DECIMALS ±.005 3. 1 PLACE DECIMALS ±.005	SIZE B	CAGE CODE 07M26	DWG. NO. 647.3900	REV. C
SCALE NONE			SHEET 6 OF 12	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

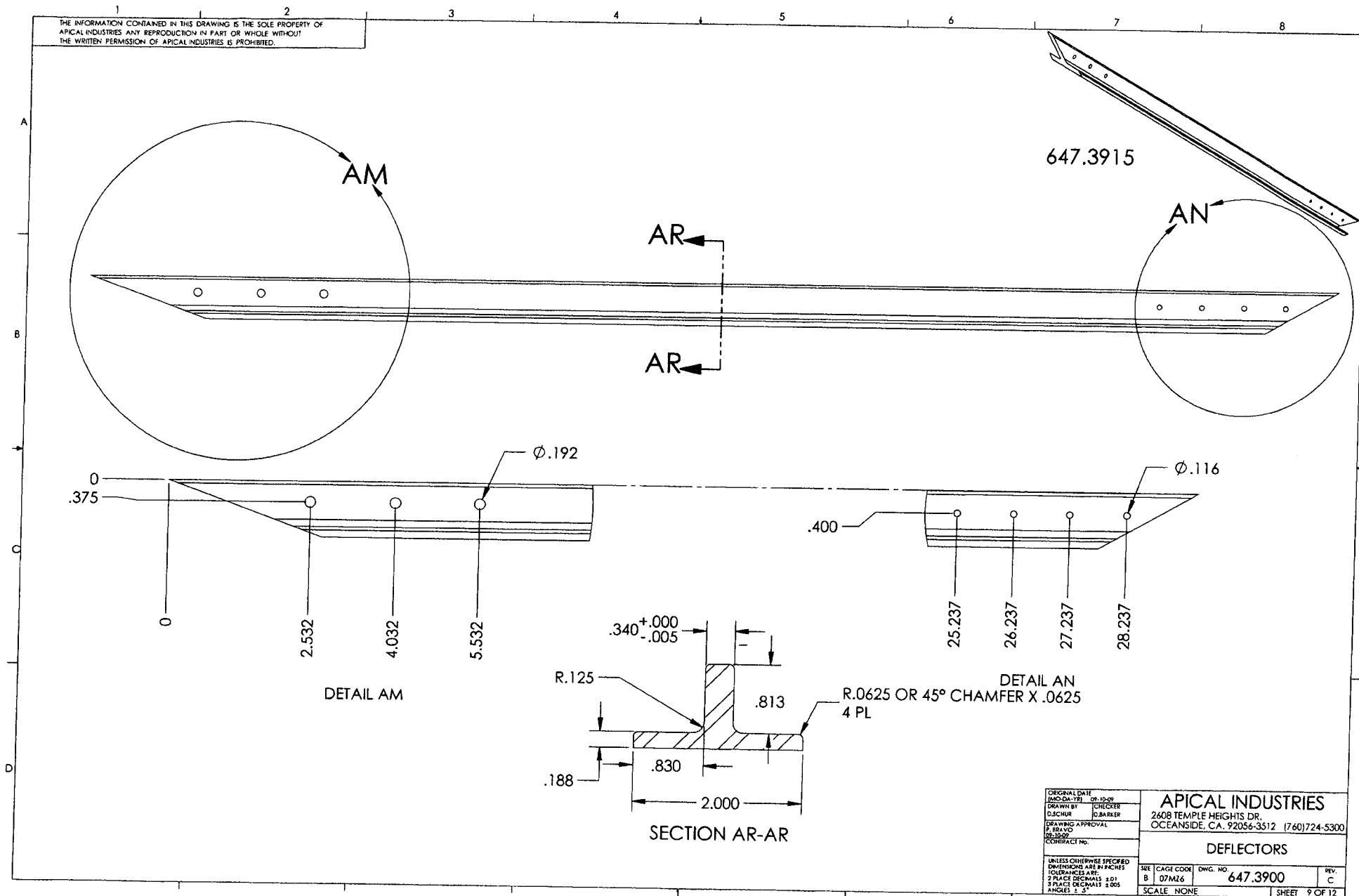


ORIGINAL DATE: 06-10-00 MODIFIED: 06-10-00		APICAL INDUSTRIES	
DRAWN BY: C. HICKER		2608 TEMPLE HEIGHTS DR.	
DESIGNED BY: D. BARNER		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BRAY		DEFLECTORS	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		SHEET: B	REV: C
TOLERANCES ARE:		SCALE: NONE	SHEET: 7 OF 12
2 PLACE DECIMALS ±.01			
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



ORIGINAL DATE (INC. DA-12) OR 10-00		APICAL INDUSTRIES	
DRAWN BY O.SCHUR	CHECKER O.BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO 05-10-07		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMAL ± .01 3 PLACE DECIMAL ± .005 ANGLES ± .5°		SHEET B	REV. C
CAGE CODE 07MA26		DWG. NO. 647.3900	SCALE NONE
SHEET 9 OF 12			

1 2 3 4 5 6 7 8

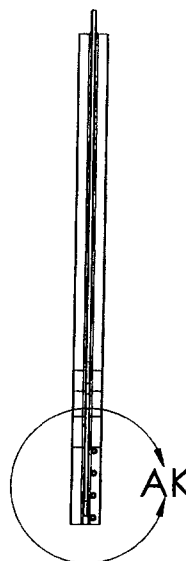
A

B

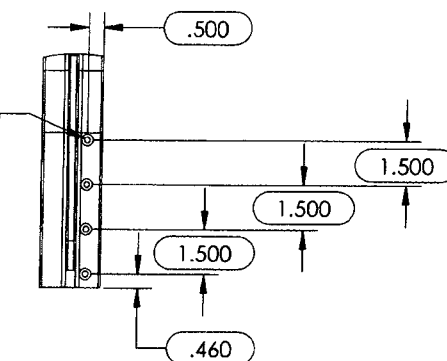
C

D

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



4X $\phi .196 \pm .010$ THRU ALL
 $\checkmark \phi .385 \pm .020 \times 100^\circ \pm 1.000^\circ$

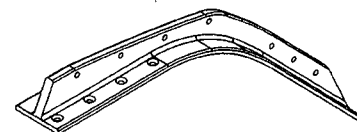


DETAIL AK

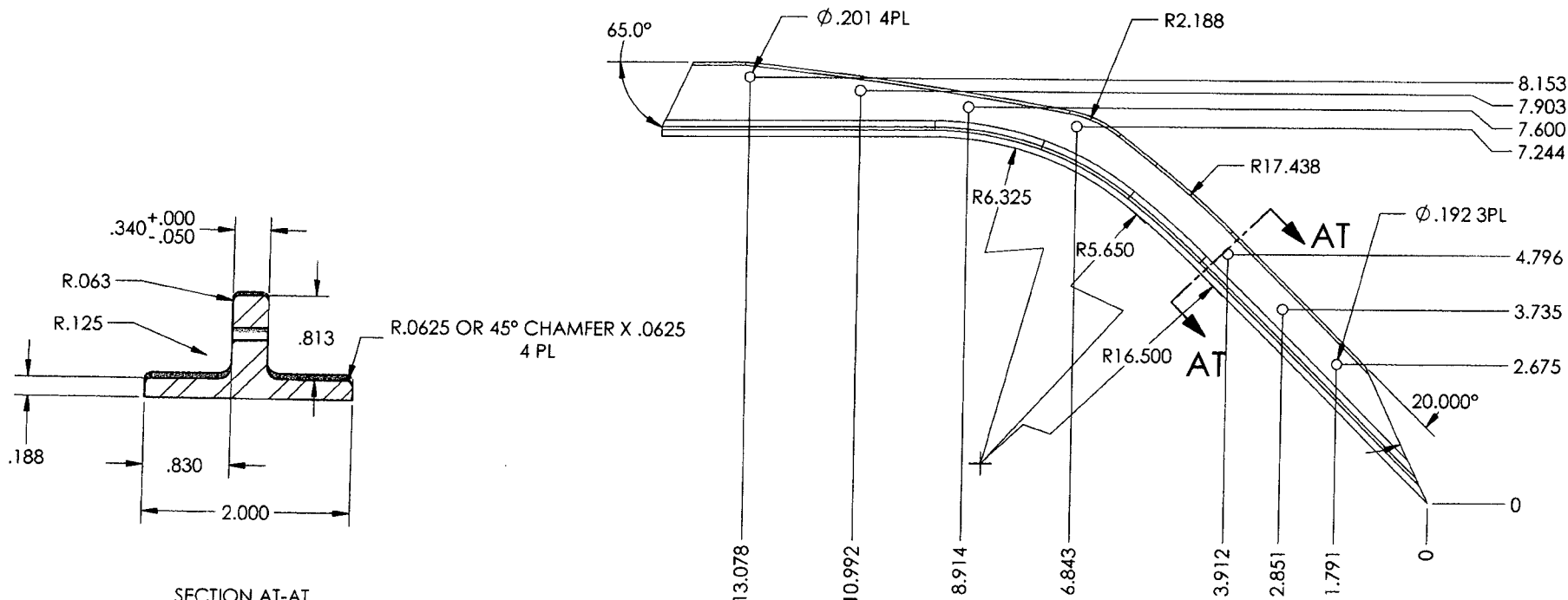
647.3915

ORIGINAL DATE (MM-DD-YY) 09-10-06		APICAL INDUSTRIES	
DRAWN BY: CHICKER		2608 TEMPLE HEIGHTS DR.	
U.S. CURR: D. BARBER		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAYNO 09-10-06 CONTRACTING.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS $\pm .01$ 3 PLACES DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$		REV B 07M26	647.3900 C
SCALE NONE		SHEET 10 OF 12	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



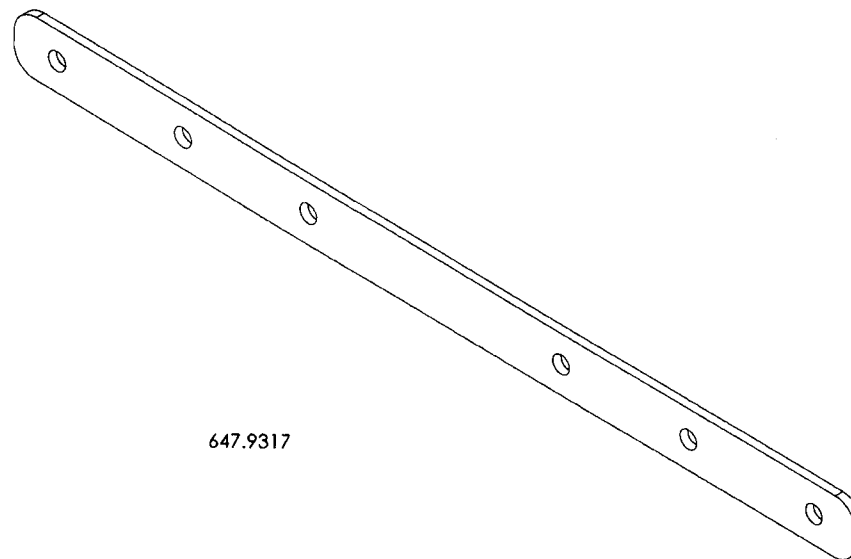
647.3916



SECTION AT-AT

ORIGINAL DATE 09-10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHUR	CHECKED BY D.BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BLAYVO 09-10-09		DEFLECTORS	
CONTRACT NO.		SHEET B	REV. C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		DWG. NO. 647.3900	
		SCALE NONE	SHEET 11 OF 12

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



R.250
4 PL

.625

0

.500

2.000

3.500

6.500

8.000

9.500

10.000

.090

Ø.196
6 PL

ORIGINAL DATE 08-10-09
DRAWN BY D.SCHUR
CHECKED D.BARKER
DRAWING APPROVAL P. BAYO
08-10-09
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SHEET B	CAGE CODE 07M16	DWG. NO. 647.3900	REV. C
SCALE NONE			SHEET 12 OF 12